

Applicant : John W. Worthington  
Serial No. : 10/674,633  
Filed : September 29, 2003  
Page : 2 of 12

Attorney's Docket No.: 07844-600001 / P553

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A computer implemented method, comprising:  
receiving user input specifying a warping tool, the warping tool having a tool perimeter having a shape and a size, the warping tool having one or more associated tool vectors, each of the tool vectors originating at a mesh point defined by a tool mesh associated with the warping tool, the user input specifying one or more of the shape of the tool perimeter, the tool mesh, and the associated tool vectors, wherein ~~movement of the warping tool within an image is controlled by user input~~, the tool perimeter defines a region of influence for the warping tool; ~~and upon application of the warping tool to the image, the region of influence covers one or more pixels in the image and a warping effect is applied to the covered pixels based at least in part on the one or more tool vectors~~  
receiving user input moving the warping tool within an image;  
applying the warping tool, in response to user input, to the image; and  
modifying one or more distortion vectors for the image in response to the application of the warping tool, the one or more distortion vectors being within the region of influence when the warping tool is applied, the one or more distortion vectors being modified based at least in part on the one or more tool vectors.
2. (Currently amended) The method of claim 1, further comprising:  
~~applying the warping tool, in response to user input, to the image, the image having one or more image regions, the application of the warping tool defining a distortion vector at each of one or more image regions based on the region of influence and the tool vectors; and~~  
modifying ~~[[the]]~~ one or more ~~image regions~~ of the image using the corresponding ~~one or more~~ distortion vectors.

Applicant : John W. Worthington  
Serial No. : 10/674,633  
Filed : September 29, 2003  
Page : 3 of 12

Attorney's Docket No.: 07844-600001 / P553

3. (Currently amended) The method of claim 2 further comprising:  
repeatedly repeating the applying the warping tool and [[the]] modifying image regions to produce a warping effect.
4. (Original) The method of claim 2, further comprising:  
displaying a representation of the modified image.
5. (Original) The method of claim 1, wherein receiving user input specifying the warping tool comprises:  
receiving user input specifying the tool mesh.
6. (Previously Presented) The method of claim 1, wherein receiving user input specifying the warping tool comprises:  
receiving user input defining a strength and/or direction of the one or more associated tool vectors.
7. (Original) The method of claim 6, wherein receiving user input defining the strength and/or direction comprises:  
receiving user input defining a rotationally asymmetric distribution for the strengths.
8. (Original) The method of claim 6, wherein receiving user input defining the strength and/or direction comprises:  
receiving user input defining a rotationally asymmetric distribution for the directions.
9. (Currently amended) The method of claim 6, wherein receiving user input defining the strength and/or direction comprises:  
receiving user input defining a strength and/or direction that change changes with time as the warping tool is applied to the image.
10. (Previously Presented) The method of claim 1, wherein receiving user input specifying the warping tool comprises:  
receiving user input specifying a rotationally asymmetric shape of the tool perimeter.

Applicant : John W. Worthington  
Serial No. : 10/674,633  
Filed : September 29, 2003  
Page : 4 of 12

Attorney's Docket No.: 07844-600001 / P553

11. (Previously Presented) The method of claim 1, wherein receiving user input specifying the warping tool comprises:

receiving user input specifying the shape of the tool perimeter.

12. (Currently amended) The method of claim 1, wherein receiving user input specifying the warping tool comprises:

receiving user input specifying a shape of the tool perimeter and/or a size that changes with time as the warping tool is applied to the image.

13. (Previously Presented) The method of claim 11, wherein receiving user input specifying the shape of the tool perimeter comprises:

receiving user input specifying a triangle, square, hexagon, octagon, rhombus, or parallelepiped.

14. (Currently amended) The method of claim 1 ~~[[2]]~~, wherein applying the warping tool comprises:

applying the warping tool in response to user input defining a movement of the warping tool from a first location to a second location relative to the image.

15. (Currently amended) The method of claim 14, wherein ~~applying the warping tool comprises~~ modifying the one or more distortion vectors includes:

calculating a distortion vector for an image region based on the movement of the warping tool and based on one or more of the associated tool vectors.

16. (Previously Presented) The method of claim 15, wherein applying the warping tool includes:

applying the warping tool using a user specified scale factor, the scale factor being used to scale the strengths associated with the tool vectors.

Applicant : John W. Worthington  
Serial No. : 10/674,633  
Filed : September 29, 2003  
Page : 5 of 12

Attorney's Docket No.: 07844-600001 / P553

17. (Currently amended) A computer program product tangibly embodied in a computer readable medium, the computer program product comprising instructions operable to cause data processing equipment to:

receive user input specifying a warping tool, the warping tool having a tool perimeter having a shape and a size, the warping tool having one or more associated tool vectors, each of the tool vectors originating at a mesh point defined by a tool mesh associated with the warping tool, the user input specifying one or more of the shape of the tool perimeter, the tool mesh, and the associated tool vectors, wherein ~~movement of the warping tool within an image is controlled by user input~~, the tool perimeter defines a region of influence for the warping tool; ~~and upon application of the warping tool to the image, the region of influence covers one or more pixels in the image and a warping effect is applied to the covered pixels based at least in part on the one or more tool vectors~~

receive user input moving the warping tool within an image;

apply the warping tool, in response to user input, to the image; and

modify one or more distortion vectors for the image in response to the application of the warping tool, the one or more distortion vectors being within the region of influence when the warping tool is applied, the one or more distortion vectors being modified based at least in part on the one or more tool vectors.

18. (Currently amended) The computer program product of claim 17, further comprising instructions operable to cause the data processing equipment to:

~~apply the warping tool, in response to user input, to the image, the image having one or more image regions, the application of the warping tool defining a distortion vector at each of one or more image regions based on the region of influence and the tool vectors; and~~

modify [[the]] one or more image regions of the image using the corresponding one or more distortion vectors.

Applicant : John W. Worthington  
Serial No. : 10/674,633  
Filed : September 29, 2003  
Page : 6 of 12

Attorney's Docket No.: 07844-600001 / P553

19. (Currently amended) The computer program product of claim 18, further comprising instructions operable to cause the data processing equipment to:

repeat the applying application of the warping tool and the modifying modification of the image regions to produce a warping effect.

20. (Original) The computer program product of claim 18, further comprising instructions operable to cause the data processing equipment to:

display a representation of the modified image.

21. (Original) The computer program product of claim 17, wherein the instructions to receive user input specifying the warping tool cause the data processing equipment to:

receive user input specifying the tool mesh.

22. (Previously Presented) The computer program product of claim 17, wherein the instructions to receive user input specifying the warping tool cause the data processing equipment to:

receive user input defining a strength and/or direction of the one or more associated tool vectors.

23. (Original) The computer program product of claim 22, wherein the instructions to receive user input specifying the warping tool cause the data processing equipment to:

receive user input defining a rotationally asymmetric distribution for the strengths.

24. (Original) The computer program product of claim 22, wherein the instructions to receive user input specifying the warping tool cause the data processing equipment to:

receive user input defining a rotationally asymmetric distribution for the directions.

25. (Currently amended) The computer program product of claim 22, wherein the instructions to receive user input specifying the warping tool cause the data processing equipment to:

receive user input defining a strength and/or direction that change changes with time as the warping tool is applied to the image.

Applicant : John W. Worthington  
Serial No. : 10/674,633  
Filed : September 29, 2003  
Page : 7 of 12

Attorney's Docket No.: 07844-600001 / P553

26. (Previously Presented) The computer program product of claim 17, wherein the instructions to receive user input specifying the warping tool cause the data processing equipment to:

receive user input specifying a rotationally asymmetric shape of the tool perimeter.

27. (Previously Presented) The computer program product of claim 17, wherein the instructions to receive user input specifying the warping tool cause the data processing equipment to:

receive user input specifying the shape of the tool perimeter.

28. (Currently amended) The computer program product of claim 17, wherein the instructions to receive user input specifying the warping tool cause the data processing equipment to:

receive user input specifying a shape of the tool perimeter and/or a size that changes with time as the warping tool is applied to the image.

29. (Previously Presented) The computer program product of claim 27, wherein the instructions to receive user input specifying the shape of the tool perimeter cause the data processing equipment to:

receive user input specifying a triangle, square, hexagon, octagon, rhombus, or parallelepiped.

30. (Currently amended) The computer program product of claim 17 [[18]], wherein the instructions to apply the warping tool cause the data processing equipment to:

apply the warping tool in response to user input defining a movement of the warping tool from a first location to a second location relative to the image.

31. (Currently amended) The computer program product of claim 30, wherein the instructions to ~~apply the warping tool~~ modify the one or more distortion vectors cause the data processing equipment to:

calculate a distortion vector for an image region based on the movement of the warping tool and based on one or more of the associated tool vectors.

Applicant : John W. Worthington  
Serial No. : 10/674,633  
Filed : September 29, 2003  
Page : 8 of 12

Attorney's Docket No.: 07844-600001 / P553

32. (Previously Presented) The computer program product of claim 31, wherein the instructions to apply the warping tool cause the data processing equipment to:

applying the warping tool using a user specified scale factor, the scale factor being used to scale the strengths associated with the tool vectors.

33. (New) The method of claim 1, further comprising:

applying a warping effect to one or more pixels in the image using the one or more distortion vectors.

34. (New) The computer program product of claim 17, further comprising instructions operable to cause the data processing equipment to:

apply a warping effect to one or more pixels in the image using the one or more distortion vectors.